CONFIDENTIAL CLAIM RETRACTED

DATE: 5/16/13

_AUTHORIZED BY: 《

PROBLEM AREA

Approval of Reclamation of Jackpile-Paguate Uranium Mine Complex



Facts.

- 1. Anaconda employs approximately 560 Lagunas. These 560 Lagunas represent 70 percent of the total Laguna workforce.
- 2. Anaconda is not operating under a mine plan which conforms to existing regulations, although several underground mines have received approvals specific to their activities.
- Anaconda began reclaiming portions of the complex within the last 4 years without submitting a reclamation plan to the Geological Survey (GS) for approval.
- 4. Anaconda recently (within the past month) shifted approximately 200 Lagunas from mining to relocating a highway to its original course. The approval of this action is within GS jurisdiction under the leases (revised in 1976), but GS has not been asked to so approve.
- 5. GS received applications for approval of two new underground operations on August 18, 1980. Anaconda has stated that, unless these two proposed actions are approved by January 1, 1981, Anaconda will cease (phase out) all underground operations by late summer 1981. If the two actions were to be approved, underground mining could continue through 1983. Anaconda is currently phasing out all surface mining operations (to be completed in late 1980?).
- 6. GS will receive a proposed reclamation plan for the entire mine complex on or about September 15, 1980. This plan will most probably be the preferred alternative of Anaconda and the Laguna Pueblo, as the Lagunas are reportedly providing input to Anaconda in the development of the reclamation plan.
- 7. The U.S. Environmental Protection Agency (EPA) has stated that it will promulgate its hazardous waste regulations pertaining to uranium mining, among others, in October 1980. The regulations will probably follow the outline of the EPA-promulgated May 19, 1980, hazardous waste regulations, and thus apply to hazardous waste generators, transporters, and disposers. The Anaconda operation will fall under these regulations. [Unknown: Whether regulations will be in draft or final form, as mining wastes are no longer identified as "special waste" as embodied in the original draft hazardous waste regulations.]
- 8. Anaconda has stated that it will close down all operations if an environmental impact statement (EIS) is to be written on the submitted reclamation plan until a preferred alternative is determined.
- 9.... BIA has a bond in the amount of \$15,000 to cover what Anaconda estimates to be a \$20 to \$30 million reclamation effort. Anaconda has been given until September 22, 1980, to provide a bond in the amount of \$10 million.

- 10. The Council of Energy Resource Tribes (CERT) and the Lagunas have expressed appreciation for the efforts of our Albuquerque office in public meetings.
- 11. In the past, under <u>Peshlakai et al.</u> v. <u>Duncan et al.</u>, the Department of the Interior (DOI) required a 2 working-day notification that a uranium activity would be approved. The last such 90-day agreement was dated March 14, 1980, expired, and has not been renewed.
- 12. The Assistant Secretary--Energy and Minerals (AS/E&M) requested that the Mobil in situ pilot project and the United Nuclear Section 30 underground operation plans and environmental assessments (EA's) be reviewed by her. The AS/E&M, to date, has not specifically requested such review of other pending actions.

Issues

- 1. Ongoing, nonapproved actions of Anaconda, including reclamation and highway relocation.
- 2. Socioeconomic effects on Laguna Pueblo.
- 3. Compliance with National Environmental Policy Act (NEPA) requirements, Council on Environmental Quality (CEQ) regulations, and forthcoming EPA hazardous waste regulations.
- 4. Adherence to 30 CFR Part 231 and to the current version of 25 CFR Part 171 versions of 25 CFR Part 171 regulations which, in current draft form, would make GS only a technical advisor to the Bureau of Indian Affairs (BIA) on mine and/or reclamation plan approvals, deleting approval responsibilities from GS on Indian lands/minerals.
- 5. DOI trust responsibilities for all tribes.

Studies--Completed

- 1. An Analysis of the Economic Potential of the Laguna Uranium Mining Leases, 1976-1985. October 1973. Arthur D. Little, Inc., consultant for Laguna Pueblo, 44 p.
- 2. Jackpile-Paguate Minesite Reclamation: Sampling Program Design. August 1977. Dames and Moore, consultant for Anaconda. [A Report on the Adequacy, Methodology, and Costs of Anaconda's Soil, Vegetation, and Air Monitoring Systems.] 80 p.
- 3. Summarie. of the Outdoor Radon and Indoor Radon Progeny Measurements at the Jackpile Open Pit Mine, New Mexico. September 1976. U.S. Environmental Protection Agency. [Summary of Results from 93 One-Time Radon Measurements within a 10-Mile Radius of the Mine.] 15 p.
- 4. Hydrogeologic Relationships--Rabbit Ear and P-10 Holding Ponds--Jackpile-Paguate Mine--Valencia County, New Mexico. June 15, 1979. Hydro-Search, Inc., consultant to Anaconda. [A Report on Contamination of Aquifers from the Mine Water Holding Ponds.] 48 p.

Studies--Ongoing

Anaconda has consultants studying the quantity and quality of the surface and subsurface waters, slope stability of the waste piles, compliance with anticipated Resource Conservation and Recovery Act regulations (EPA, to be promulgated in October 1980), and several other unknown aspects of the operation. The extent and specific nature of the other studies and whether a formal report on any of these studies will be prepared will-not be known until after the proposed reclamation plan is submitted.

The Laguna Pueblo either plan to undertake or contract a regional ground water study of the effects of all uranium mining on the Laguna water supply. This study has already been partially funded by BIA (\$75 K out of \$145 K) without consultations with GS.

Studies--Future

The following decisions or studies of impacts require expertise not currently available in the Office of the Conservation Manager--South Central Region and will require special studies and/or review by experts. It is possible that some reports generated under Studies--Ongoing may answer in whole or in part some of the decisions listed below.

- 1. Disposition of highwalls. Anaconda wishes to knock down unstable rock and construct a fence along the top rim. What will be the long-term stability of the highwalls? Sloping them to the natural angle of repose (40 degrees) could improve their safety, but they would still be erodible and could not be revegetated. Sloping them to 20 degrees would be very expensive and would consume much land.
- 2. Disposition of protore. The protore contains the highest, currently non-eccomically extractable, concentration of radionuclides and may be millable some day. Protore disposition must be both permanent and accessible. If the protore is placed within the Jackpile Sandstone (an aquifer), would the protore contaminate the ground water?
- 3. Disposition of ore-associated waste. For the past several years, the ore-associated waste has been segregated from all other waste. In what manner could this material be disposed so as to not cause ground water contamination due to leaching?
- 4. Amount of top-dressing needed. What amount of top-dressing will contain the release of gamma radiation and radon to acceptable levels for the protore, the ore-associated waste, other waste, and the in situ zone?
- 5. Disposition of waste pile slopes. The waste pile slopes presently lie at the natural angle of repose (40 degrees), are extremely erodible, and cannot be revegetated. What slope will allow stabilization of the waste piles through top-dressing and revegetation?

- 6. Impact on drainages blocked by waste piles. Will such drainages increase the natural leaching of the waste piles? Is the magnitude of the problem great enough to require removal of the waste piles?
- 7. Drainage in the pits. The proposed reclamation plan will include the creation of micro-basins in the pits. Will any water ponded in such depressions be contaminated?
- 8. Reestablishment of Rio Paguate and Rio Moquino floodplain and channels. These channels must be constructed to control flooding, while at the same time preventing natural meandering which could erode waste piles or backfilled areas. What would be the best methodology for accomplishing this reestablishment?
- 9. Amount of backfilling. The amount of backfilling will have an impact on the number, length, and size of the highwalls remaining and the amount of waste pile sloping that must be completed. Could extensive backfilling eliminate most of the highwalls and waste piles, eliminate most waste pile stabilization problems, reduce the releases of radon, lessen the problem of a shortage of top-dressing, reduce visual impacts, reduce pit drainage problems, and allow for the reestablishment of the floodplains of the Rio Paguate and Rio Moquino? If so, to what extent is backfilling required?
- 10. Residual radiation. How will residual radiation releases affect the surface and ground water and ambient atmosphere? Will human health be impacted?
- 11. Revegetation species. Which revegetation species are correct for the desired land use (grazing?), and what is their potential for concentrating radionuclides and other toxic elements, such as heavy metals, in the long term?

There are numerous additional decisions to be made and impacts to be assessed prior to final abandonment; however, the Office of the Conservation Manager-South Central Region is more than capable of handling these decisions. It is not known if the above listed studies can be completed expeditiously to allow for decisionmaking within the next 2 years.

[NOTE: The information for the 11 items in this section was supplied by Marc Nelson, Albuquerque.]

Options/Alternatives

I. No action. Under the 1976 revised leases, the lessee must conform to 30 CFR 231, 25 CFR Part 171, and all other DOI regulations. The company is in violation of these lease agreements in that, although they are currently reclaiming portions of the pit area, as well as apparently relocating a highway, these actions have not been submitted to GS for approval. In essence, DOI is not carrying out their mandated responsibilities, as they are not enforcing the provisions of 30 CFR Part 231 and 25 CFR Part 171 et al.

Pros: o None.

Cons: o If DOI takes no action on the submitted reclamation plan, the above described situation will worsen.

II. Delay approval.

A. Wait until 25 CFR Part 171 et seq. are revised (see <u>Federal Register</u>, Monday, August 11, 1980, pp. 53164-53180).

Pros: o Puts "burden of decision" on BIA, as GS would be only a technical advisor to BIA if the regulations are finalized as currently proposed.

Cons: o Indefinite time period until finalization.

- Reduces GS responsibilities embodied in existing regulations.
- B. Wait until EPA promulgates its hazardous waste regulations regarding mining.
 - Pros: o Regulations may define threshhold levels of radionuclide contaminants in hazardous waste.
 - o Regulations should contain guidance for mitigation of impacts due to radionuclide contaminants (e.g., controlling radon gas emissions or gamma radiation).
 - Cons: o Since mining wastes will not be considered as "Special Wastes" (this category has been deleted from EPA's hazardous waste regulations), the regulations coming out in October 1980 will most probably be as interim final rulemaking for review and comment prior to final promulgation. Thus, there may be an indefinite waiting period until the regulations are finalized.
 - o Once the regulations are finalized, it is unknown what will be the effective date of applicability.
 - o It is unknown to what extent the regulations will apply specifically to the Jackpile-Paguate reclamation.
 - o After the regulations become effective, a decision would still be required as to whether NEPA applies (see IV.B.) or does not apply (see III.B.).
 - o Could compromise (i.e., limit) GS responsibilities embodied in existing regulations regarding reclamation alternatives.
- III. Disregard compliance with NEPA and CEQ regulations (i.e., no preparation of EA or EIS).
 - A. Approve the entire reclamation plan as submitted.

Pros: o Reclamation could begin as soon as the plan is technically and administratively complete.

- Cons: o Unanswered questions (see Studies--Ongoing and Studies--Future); therefore, no stipulations to approval regarding these questions.
 - o Does not comply with NEPA.
- B. Partial approval of those portions of the reclamation plan which would not prejudice the results of the Studies.
 - Pros: o Allows Studies to be completed which would enable stipulations to be based on derived data and subsequent recommendations.
 - Cons: o Potential breaks in tribal employment if the Studies are not completed prior to finishing the reclamation which has been approved.
 - o Difficulty in identifying the portions of the reclamation plan which could be approved without prejudicing the result of the Studies.
 - o Does not comply with NEPA.
- IV. Compliance with NEPA using exception clauses in CEQ regulations.
- A. 40 CFR §1506.1(c). [Allows approval of nonsignificant actions, the approval of which would not prejudice the ultimate decision through determining subsequent development or through limiting alternatives.]
 - Pros: o Same as III.B., except allows for EA or EIS preparation.
 - Cons: o Same as III.B., except complies with NEPA.
 - o Uncertainty as to whether "program" EIS, as addressed in 40 CFR 91506.1(c), applies to the reclamation plan v. a Federal program for handling reclamation of uranium mining and milling wastes.
 - o A comprehensive EA could determine the need for additional studies which would be required prior to developing approval stipulations. These studies would be in addition to those listed under Studies--Ongoing and Studies--Future.
 - o A comprehensive EA may recommend EIS preparation.
- B. 40 CFR §1506.11 (Emergencies). [Allows for approval of significant actions without observing the other provisions of the CEQ regulations.]
 - Pros: o Same as III.B., except EIS not necessary, although this complies with NEPA.

o Could allow DOI to take whatever actions were necessary to ensure reclamation without NEPA documentation.

Cons: o Same as III.B., except complies with NEPA.

- o Socioeconomic effects on the Lagunas may not be deemed an emergency under "serious resource losses" (516 DM 5.8), although they could under the CEQ regulations.
 - Necessitates DOI and CEQ participation in all decision phases.

MOTE: There are several viable approaches which could be taken to implement II.B., III.B., IV.A., or IV.B. One approach involving EPA directly, as opposed to DOI contracting certain studies to EPA among others, follows:

- 1. Upon receipt of a technically and administratively complete reclamation plan from Anaconda, Laguna Pueblo concurrence be obtained as expeditiously as possible.
- 2. GS, in consultation with BIA, grant partial approval to Anaconda for those portions of the reclamation plan which would not compromise the objective findings of Studies--Ongoing and Studies--Future. (Authorized under 25 CFR $\S177.7(g)$.)
- 3. DOI approach EPA with a proposal to jointly undertake and/or fund contracting for Studies--Ongoing and Studies--Future. In essence, the objective of the studies would be to gather sufficient information to either satisfy the questions raised under the Studies sections or to ensure continual monitoring of those portions of the reclamation plan which would be approved without knowing the final result (40 CFR §1502.22). Thus, studies would be concurrently proceeding with reclamation (see 25 CFR §177.7(g)). Another major objective would be to utilize the reclamation of this mine complex as a test of the viability of EPA's hazardous waste regulations for mining, to be promulgated in October 1980. [NOTE: The major reason EPA delayed promulgation of these regulations was due to a lack of information.] A third major objective would be the acquisition or generation of sufficient data to not only ensure the reclamation, but also to set precedent for future approvals of such uranium reclamation plans. Of course, DUI would retain final approval authority for joint DUI/EPA ventures for any actions falling under 30 CFR Part 231 and 25 CFR Part 171 et seg., as would EPA for any permitting to be done under their enabling legislation.
- 4. DOI/EPA generate an agreement to be reviewed annually and renewed biannually. This agreement, as well as documentation justifying its generation, should be submitted to CEQ under 40 CFR §1506.11 (Emergencies). It should be of utmost importance to ensure that a document similar to a "Record of Decision" (40 CFR §1505.2) be prepared and kept on file in the Office of the Conservation Manager--South Central Region for every approval action related to the reclamation of the Jackpile-Paguate uranium mine complex.

- V. Compliance with NEPA (i.e., prepare EIS with no partial approvals).
 - Pros: o Enables interdisciplinary approach toward ascertaining a preferred alternative for reclamation.
 - o Could allow for Laguna Pueblo, BIA, and, if necessary, under the to be promulgated hazardous waste regulations, EPA, to tracome joint lead entities.
 - Cons: o If the tribe concurs with the reclamation plan to be submitted, the plan essentially would be the preferred alternative of both the company and the tribe. The results of the EIS could compromise this alternative.
 - o Could result in major socioeconomic impact on Laguna Pueblo if workers are laid off until completion of, and decision on, the FIS.
 - o Difficulty in determining priority between DOI's trust responsibility and data to be derived from completion of Studies-Future.

Action Items

- Ascertain AS/E&M preference regarding her involvement in the approval of uranium actions within DOI under Peshlakai et al. v. Duncan et al. In the absence of an agreement with the court (see Facts, 11.), AS/E&M should be requested to allow GS to conduct "business as usual," specifically without AS/E&M involvement, unless so warranted under current GS procedures. If AS/E&M concurs, the approval of the two minor underground operations (see Facts, 5.) could be made by the Deputy Conservation Manager--Mining, South Central Region, upon satisfactory completion of EA's on the mine plans when they are technically and administratively complete. Such approval, requested by Anaconda to be given prior to December 31, 1980, should diminish, if not negate, the socioeconomic hardship which would result from layoffs while the Studies/EIS were being completed. Since Options/Alternatives, IV.B., is based on the emergency being the socioeconomic effects on the Lagunas, this option/alternative would be removed from further consideration. [It should be noted that the course of action to be taken regarding the approval of the Section 26 minor underground extension of an existing underground operation is also awaiting this response from AS/E&M. It has received Conservation Division (CD) headquarters review, is in approvable form, and could be approved by the Deputy Conservation Manager--Mining, South Central Region, immediately.]
- 2. Subsequent to item 1 above, CD must decide which portion of which option/ alternative is the CD preferred approach to the Jackpile-Paguate reclamation. If the preferred approach is other than V. Compliance with NEPA (i.e., prepare EIS with no partial approval), the Conservation Manager--South Central Region should be notified immediately. A teleconference among the Branch of Environmental Management--Onshore, the Branch of Solid Minerals Management, the Deputy Division Chief--Onshore Minerals Regulation, the Chief, CD, and the Conservation Manager--South Central Region staff (Marc Nelson and Ed Sandell at a minimum) should be utilized to determine the preferred approach.

3. Subsequent to item 1 above, if the preferred approach is Option/Alternative V., a memorandum so notifying the Director must be prepared for his concurrence, account numbers decided upon, joint lead and cooperating Agency staff contacts identified, and scoping meetings held as expeditiously as possible. This also applies in part to Option/Alternative IV.A., if the Conservation Manager--South Central Region recommendation to prepare an EIS is agreed to by CD headquarters.

(ABAgnew:8/29/80)